

WHAT IS CLAIMED IS:

1. Structure of a wave filter, comprising

a circuit board including a substrate, and electronic parts on the
5 substrate; the substrate having a connecting head, and a lead respectively
secured to two ends thereof by means of solder welding;

a metallic holding tube having a first end portion, and a fitting end
portion at other end; the first end portion having screw threads on an
outer side thereof, and an insulating ring fitted therein; the fitting end
10 portion having an annular groove on an outer side thereof, and a
leak-stoppage ring fitted onto the annular groove; and

a metallic cap having first and second tube-shaped end portions at
two ends thereof; the cap having a separating part disposed between the
tube-shaped end portions and secured to an inner side thereof; the cap
15 having an insulating ring secured within the separating part thereof; the
second tube-shaped end portion having screw threads on an inner side;

the circuit board being held in the holding tube with the connecting
head being received in the threaded first end portion of the holding tube;
the substrate being secured to an inner side of the holding tube by means
20 of solder welding such that the circuit board is grounded;

the fitting end portion of the holding tube being tightly fitted in the
first tube-shaped end portion of the cap such that the leak-stoppage ring
is tightly sandwiched between the cap and the holding tube; the lead of

the circuit board passing through the insulating ring of the cap, and projecting outwards from the cap.

2. Structure of a wave filter, comprising

a circuit board including a substrate, and electronic parts on the
5 substrate; the substrate having a connecting head, and a lead respectively
secured to two ends thereof by means of solder welding; a metallic
holding tube having a first end portion, and a fitting end portion at other
end; the first end portion having screw threads on an outer side thereof,
and an insulating ring fitted therein; and a metallic cap having first and
10 second tube-shaped end portions at two ends thereof; the cap having a
separating part disposed between the tube-shaped end portions and
secured to an inner side thereof; the cap having an insulating ring
secured within the separating part thereof; the second tube-shaped end
portion having screw threads on an inner side; the circuit board being
15 held in the holding tube with the connecting head being received in the
threaded first end portion of the holding tube; the fitting end portion of
the holding tube being tightly fitted in the first tube-shaped end portion
of the cap; the lead passing through the insulating ring of the cap, and
projecting outwards from the cap; and having characteristics that the
20 fitting end portion of the holding tube has an annular groove on an outer
side, and that a leak-stoppage ring is fitted onto the annular groove such
that the leak-stoppage ring is tightly sandwiched between the cap and the
holding tube.

3. Structure of a wave filter, comprising

a circuit board including a substrate, and electronic parts on the substrate; the substrate having a connecting head, and a lead respectively secured to two ends thereof by means of solder welding;

- 5 a metallic cap having first and second tube-shaped end portions at two ends thereof; the cap having a separating part disposed between the tube-shaped end portions and secured to an inner side thereof; the cap having an insulating ring secured within the separating part thereof; the first tube-shaped end portion having an annular groove on an outer side
10 thereof, and a leak-stoppage ring fitted onto the annular groove; the second tube-shaped end portion having screw threads on an inner side;

a metallic holding tube having a first end portion, and a fitting end portion at other end; the first end portion having screw threads on an outer side thereof, and an insulating ring fitted therein;

- 15 the substrate of the circuit board being partially held in the first tube-shaped end portion of the cap with the lead passing through the insulating ring of the cap, and projecting outwards from the cap;

- the fitting end portion of the holding tube being tightly fitted around the first tube-shaped end portion of the cap such that the
20 leak-stoppage ring is tightly sandwiched between the cap and the holding tube, and such that the connecting head is received in the threaded first end portion of the holding tube.

4. Structure of a wave filter, comprising

a circuit board including a substrate, and electronic parts on the substrate; the substrate having a connecting head, and a lead respectively secured to two ends thereof by means of solder welding;

5 a metallic cap having first and second tube-shaped end portions at two ends thereof; the cap having a separating part disposed between the tube-shaped end portions and secured to an inner side thereof; the cap having an insulating ring secured within the separating part thereof; the first tube-shaped end portion having an annular groove on an outer side
10 thereof, and a leak-stoppage ring fitted onto the annular groove; the second tube-shaped end portion having screw threads on an inner side;

a metallic holding tube having a first end portion, and a fitting end portion at other end; the first end portion having screw threads on an outer side thereof, and an insulating ring fitted therein;

15 the substrate of the circuit board being partially held in the first tube-shaped end portion of the cap with the lead passing through the insulating ring of the cap, and projecting outwards from the cap; the substrate being secured to an inner side of the first tube-shaped end portion of the cap by means of solder welding such that the circuit board
20 is grounded;

the fitting end portion of the holding tube being tightly fitted around the first tube-shaped end portion of the cap such that the leak-stoppage ring is tightly sandwiched between the cap and the holding

tube, and the connecting head is received in the threaded first end portion of the holding tube.

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